

REMARKS

The above-identified application is United States application serial number 10/828,448 filed on April 19, 2004. Claims 1-25 are pending in the application. Claims 1-25 are rejected. Claim 9 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 4, 9, 10-12, 21-23, and 25 are rejected under 35 U.S.C. §102(b) as being anticipated by Cheon (U.S. Patent No. 5,731,954). Claims 3, 7, 8, and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cheon. Claims 14-20 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cheon in view of Fox et al (U.S. Patent No. 5,285,347). Claims 2, 5, and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cheon in view of Koizumi (U.S. Patent No. 5,203,399).

Specification

Applicant has corrected the reference number for the chassis on page 4, paragraph [0016].

Drawings

Regarding the objection to the drawings for failing to comply with 37 CFR §1.84(p)(5), the applicants direct the Examiner to paragraph [0011] of the application, as filed, which mentions "exterior surface 106."

Regarding the objection to the drawings for failure of the specification to match reference numbers in the drawings in **FIGURE 7**, the applicant has amended the figure to correct the reference numbers.

Rejection of Claims under 35 U.S.C. §112

Applicant has amended Claim 1 and Claim 9 in a manner that corrects antecedent basis insufficiency.

Rejection of Claims under 35 U.S.C. §102(b)

Regarding the rejection of Claims 1, 4, 9, 10-12, 21-23, and 25 under 35 U.S.C. §102(b) as being anticipated by Cheon, applicants have amended the claims. The claims are

allowable at least because Cheon fails to disclose “a tube extending in a loop interior to an electronic system chassis, through a chassis wall, and exterior to the chassis” or “a liquid loop heat exchanger body comprising a parallel stack of closely-spaced plate fins enclosing and coupled to a portion of the loop external to the chassis.” In Cheon the tube does not pass through the chassis or extend exterior to the chassis but instead terminates at reservoir 48. The heat exchanger disclosed in Cheon does not have the claimed structure.

Similar amendments to Claims 10 and 21 are made that distinguish over Cheon.

Rejection of Claims under 35 U.S.C. §103(a)

Regarding the rejection of Claims 3, 7, 8, and 13 under 35 U.S.C. §103(a) as being unpatentable over Cheon, the claims are allowable at least on the basis of the amendments to independent Claims 1 and 10. Applicants traverse several aspects of the rejections. Although “change in size is generally recognized as being within the level of ordinary skill in the art (*In re Rose*, 105 USPQ 237 (CCPA 1955).” However, applicants do not claim a “change in size” but rather claim a particular structure expressed in terms of relative size.

Applicants further traverse rejections relating to fin arrangement enabling access to indicator lights or other device structures and demand evidence that the noticed fact is well known. Applicants are aware of no other examples of heat exchangers with fins in a configuration modified according to lights and other structures on a chassis. Furthermore, none of the references listed in US PTO form 892 even hint at such heat exchanger structure.

Applicants further traverse rejections based on official notice of hinged tube couplings and demand evidence that the noticed fact is well known. Even if hinged tube couplings are well known, applicants dispute that such hinges applied to enable rotation of a heat exchanger from a chassis is known.

Regarding the rejection of Claims 14-20 and 24 under 35 U.S.C. §103(a) as being unpatentable over Cheon in view of Fox et al, applicants have amended the claims. The claims are allowable at least because the combination of Cheon and Fox fails to disclose “a liquid loop heat exchanger comprising a parallel stack of planar plate fins exterior to the chassis, coupled to the exterior tubing segment, and arranged perpendicular to a planar surface of the chassis.”

Regarding the rejection of Claims 2, 5, and 6 under 35 U.S.C. §103(a) as being unpatentable over Cheon in view of Koizumi (U.S. Patent No. 5,203,399), applicants have amended the claims to distinguish over the cited references. The claims are allowable at least because the combination of Cheon and Koizumi fails to disclose "a tube extending in a loop interior to an electronic system chassis, through a chassis wall, and exterior to the chassis" or "a liquid loop heat exchanger body comprising a parallel stack of closely-spaced plate fins enclosing and coupled to a portion of the loop external to the chassis." The combined references also fail to disclose "the parallel stack of closely-spaced plate fins arranged in a plurality of mutually parallel planes attached to the tube segment and arranged perpendicular to the chassis exterior surface."

CONCLUSION

The application, including all remaining Claims 1-25, is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned at (949) 251-0250.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

(Signature)

Joy C. Ngo

(Printed Name of Person Signing Certificate)

September 12, 2005

(Date)

EV 566315627 US

(Express Mail Label No.)

Respectfully submitted,



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In the Drawings

The attached sheet of drawings includes changes to sheet 10/10.

Attachment: Replacement Sheets (1 page)
Annotated Sheet Showing Changes (1 page)

ANNOTATED SHEET SHOWING CHANGES
10/10



FIG. 7